

Manual



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Software version: 1.0 (07/2013)

Special thanks to the Beta Test Team, who were invaluable not just in tracking down bugs, but in making this a better product.

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1 Welcome to DRUMLAB

Thank you for purchasing DRUMLAB. On behalf of the Native Instruments team, we hope this new KONTAKT library truly inspires you.

DRUMLAB adds a selection of exclusively sampled drums and percussion instruments as well as electronic sounds that can be mixed together for the most well-rounded drum sounds available. You also have full access to top-tier quality effects and a huge collection of professionally crafted MIDI grooves to create drum tracks for your music projects. The DRUMLAB library integrates seamlessly into the latest versions of KONTAKT 5 and the free KONTAKT PLAYER.

This manual will introduce you to all instruments and effects contained in the library as well as give you step-by-step instructions on how to get the most of your product.

DRUMLAB Document Overview

- For a quick introduction to DRUMLAB's interface and step-by-step guides to basic functions, see section ↑2, Quick Start.
- For detailed information about the controls available for DRUMLAB's instruments and effects and how to edit these, see section ↑3, Kit Page.
- For information about the MIDI patterns included to play back the drums, see section ↑4, Grooves Page.
- For information about "technical" settings, e.g. MIDI mapping, see section ↑5, Options Page.
- For detailed information about the use of single DRUMLAB instruments in KONTAKT, see section ↑6, Using Single Instrument NKIs.

Document Conventions

This document uses particular formatting to point out special facts and to warn you of potential issues. The icons introducing the following notes let you see what kind of information can be expected:



Whenever this exclamation mark icon appears, you should read the corresponding note carefully and follow the instructions and hints given there if applicable.



This light bulb icon indicates that a note contains useful extra information. This information may often help you to solve a task more efficiently, but does not necessarily apply to the setup or operating system you are using; however, it's always worth a look.

Furthermore, the following formatting is used:

- Text appearing in (drop-down) menus (such as *Open..., Save as...* etc.) and paths to locations on your hard drive or other storage devices is printed in *italics*.
- Text appearing elsewhere on the screen (labels of buttons, controls, text next to checkboxes etc.) is printed in light blue. Whenever you see this formatting applied, you will find the same text appearing on the screen.
- Important names and concepts are printed in **bold**.
- References to keys on your computer's keyboard you'll find put in square brackets (e.g., "Press [Shift] + [Return]").
- ▶ Single instructions are introduced by this play button type arrow.
- → Results of actions are introduced by this smaller arrow.

2 Quick Start

In this chapter, you will find a quick guide to navigating the controls of DRUMLAB, as well as step-by-step guides to certain functions.

2.1 Basic Navigation

DRUMLAB's interface consists of three major sections:



DRUMLAB's main interface

(1) **Header**: This section will always appear at the top of the interface, regardless of which page is selected. Use the header to select sound presets and MIDI grooves.

- (2) Pages: This section displays the content of the selected page. The DRUMLAB interface has three control pages: Grooves, Options, and Kit Page. Use the settings on each page to interact with the drums and grooves.
- (3) Page tabs: Use these tabs to navigate to the Grooves, Options and Kit Page.

2.1.1 Header

DRUMLAB's header gives you quick access to its sound presets and grooves. Independently of the page selected, this header will always be visible at the top of the interface, allowing you to quickly browse through available sound presets and grooves.



DRUMI AB's header

2.1.2 Pages and Page Tabs

DRUMLAB has three different control pages: Grooves, Options, and Kit Page. You can select a page by clicking the corresponding tab at the bottom of the interface. The different pages and their uses are as follows:

• Grooves page: On this page is a browser of many genre-separated MIDI grooves and fills with variations that can be dragged to your host for immediate song creation. Above the GROOVE BROWSER is a visual representation of the selected groove, where each MIDI event is displayed as a beat on a rhythmic grid. For details on the Grooves page, see section ↑4, Grooves Page.



 Options page: Use this page to edit options for technical kit settings such as MIDI note mapping and velocity ranges. For details on the Options page, see section ↑5, Options Page.



• Kit Page: Use this page to select drums and adjust settings for each instrument, e.g. selecting acoustic and electronic layers, adjusting microphone mixes, and adding effects. For details on the Kit Page, see section ↑3, Kit Page.



2.2 Selecting Tiles to Edit DRUMLAB Instruments and Effects

This section contains step-by-step instructions to DRUMLAB's basic functions and workflows to help you get started. Use the Kit Page to select drums, microphones, and effects and to edit their parameters. For detailed information about the instruments and their controls, see section \$\gamma3\$, Kit Page.

2.2.1 Selecting Instrument Layers

Each instrument comes with a number of acoustic layers that can be selected and edited. Some instruments come with both acoustic and electronic layers, which can be combined for well-rounded drum sounds.

Selecting an Acoustic Layer

To change an instrument's acoustic layer:

- 1. Click on the Kit Page tab at the bottom of the interface.
- 2. Select an instrument by clicking its tile.



- 3. Click on the SOURCE tab in the instrument's footer.
- Open the list of available acoustic layers by clicking in the middle of the Acoustic layer selector.



5. Change the layer by selecting an acoustic layer from the drop-down menu.

6. If an instrument also has an electronic layer, you can mix the two layers by clicking and dragging the crossfader.





You can adjust the balance between the layers of **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while clicking and dragging the crossfader.

Selecting an Electronic Layer

To change an instrument's electronic layer:

- 1. Click on the Kit Page tab at the bottom of the interface.
- 2. Select an instrument by clicking its tile.



3. Click on the SOURCE tab in the instrument's footer.





- 5. Change the layer by selecting an item from the drop-down menu.
- 6. Mix the electronic layer with the acoustic layer by clicking and dragging the crossfader.





You can adjust the balance between the layers of **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while clicking and dragging the crossfader.

2.2.2 Fine-Controlling the Sound of an Instrument

To adjust an individual instrument's (or even a single sample layer's) sound settings:

- 1. Click on the Kit Page tab at the bottom of the interface.
- 2. Select an instrument by clicking its tile.



- 3. Click on the SOURCE tab in the instrument's footer.
- ► Alter the pitch by adjusting the Tune knob.





You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

► Change the overhead and room mix amounts for each instrument by adjusting the corresponding OH/Room knob.





Drums recorded with additional microphones, e.g. Out & Sub microphones and Top & Bottom microphones, have the additional parameters: Trash, Out/Sub and Top/Btm. These can be used to adjust the corresponding microphone levels.

► Edit the volume envelope by adjusting the Attack, Hold and Decay with the respective knobs.



► Add a low-pass filter to an instrument's electronic layer by turning the Filter knob counterclockwise.



Add a high-pass filter to an instrument's electronic layer by turning the Filter knob clockwise.



▶ Delay the triggering of an instrument's electronic layer by turning the Tr. Offset knob clockwise. A delay of up to 50 ms can be applied.



2.2.3 Adding Effects to an Instrument

The kick, snare, hi-hat, toms and some percussion instruments can be processed by designated effect units. You can use effects to enhance the sound of your drums or to refine certain frequencies. For detailed information on each instrument's effect parameters, refer to the corresponding sections in chapter \3, Kit Page.



The EFFECTS tab

Editing the Transients

To change TRANSIENTS settings:

- 1. Click on the Kit Page tab at the bottom of the interface.
- 2. Select an instrument by clicking its tile.



- 3. Click on the EFFECTS tab in the instrument's footer.
- 4. Activate the effect by clicking the switch left of the effect's label so it lights up.



5. Fine-tune the effect by adjusting the Attack and Release knobs.

Editing the Compressor

To change COMPRESSOR settings:

- 1. Click on the Kit Page tab at the bottom of the interface.
- 2. Select an instrument by clicking its tile.



- 3. Click on the EFFECTS tab in the instrument's footer.
- 4. Activate the effect by clicking the switch left of the effect's label so it lights up.



5. Fine-tune the effect by adjusting the Amount and Attack knobs.

Editing the Saturator

To change SATURATOR settings:

1. Click on the Kit Page tab at the bottom of the interface.



2. Select an instrument by clicking its tile.

- 3. Click on the EFFECTS tab in the instrument's footer.
- 4. Activate the effect by clicking the switch left of the effect's label so it lights up.



5. Fine-tune the effect by adjusting the Gain and Level knobs.

Editing the Equalizer

To change EQUALIZER settings:

- 1. Click on the Kit Page tab at the bottom of the interface.
- 2. Select an instrument by clicking its tile.



3. Click on the EFFECTS tab in the instrument's footer.





5. Fine-tune the effect by adjusting the Low, Mid, and High EQ bands and their corresponding Gain knobs.

Editing the Reverb

To adjust the amount to which the selected instrument is processed by the REVERB effect:

- 1. Click on the Kit Page tab at the bottom of the interface.
- 2. Select an instrument by clicking its tile.

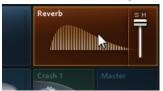


- 3. Click on the EFFECTS tab in the instrument's footer.
- 4. Adjust the amount of reverb by turning the Send Level knob.



To select a reverb space for the **entire kit**:

1. Select the Reverb effect by clicking the Reverb tile in the upper right corner so that a selection of available spaces appears in the footer.

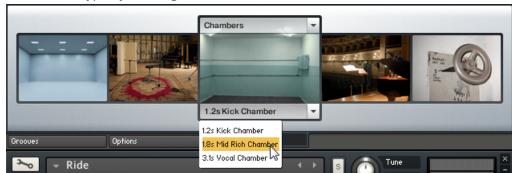


2. Scroll though the available spaces by clicking the images to the right or the left of the currently selected reverb space.



3. Open the list of available subtypes for each space by clicking the drop-down menu.





4. Select a subtype by clicking one of the items in the menu.

5. Set the level of the reverb for the entire kit by clicking and dragging the fader on the Reverb tile.





The settings of the Reverb tile are not instrument-specific. Selecting another reverb space adjusts the reverb settings for all instruments simultaneously.

2.3 Handling Grooves and Sound Presets

2.3.1 Selecting a Groove

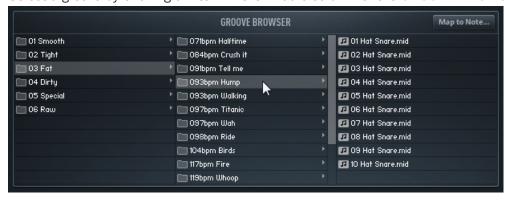
DRUMLAB comes with a vast selection of MIDI grooves to play back your drums with authentic rhythms used in popular music genres. For detailed information on the Grooves page, refer to section 14, Grooves Page. To select and play back a MIDI groove:

1. Click on the Grooves tab at the bottom of the interface.





3. Select a groove by clicking an item in the middle column of the GROOVE BROWSER.



4. Select and load a variation by double-clicking an item in the right column of the GROOVE BROWSER.



→ A visual representation of the groove you selected is displayed in the form of a piano roll above the GROOVE BROWSER. The current position is marked by a playhead.



2.3.2 Selecting a Sound Preset

On the left side of DRUMLAB's header, you find a section dedicated to sound presets. Loading a sound preset will adjust microphone settings, select instruments and turn effects on or off. To load a sound preset:

1. Select a genre of sound presets by clicking the upper drop-down menu and selecting one of the items from the appearing list.



2. Load a sound preset by clicking the lower drop-down menu and selecting one of the items from the appearing list.



→ Notice how the controls on the Kit Page change to reflect the settings of the loaded sound preset. Quickly step between sound presets of the same type group by clicking the left and right buttons next to the drop-down menu.

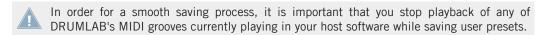


2.3.3 Saving User Presets

You can save your own sound presets for the settings of the drums by using the drop-down menus in the header while viewing the Kit Page, and save MIDI mapping layouts on the Options page (for details on MIDI mapping presets, refer to section $\uparrow 5.1.1$, MIDI Mapping). Each of these preset menus contains a selection of factory presets and also allows you to save your own custom presets. Factory presets cannot be overwritten (indicated by the darkened \emptyset button), but they can be adjusted and saved as a new user preset.

To save a user preset:

- 1. Click on the Kit Page tab at the bottom of the itnerface.
- 2. Adjust the settings you want to save and recall for your preset.



3. Click in the text area of the lower drop-down menu so a cursor appears.



4. Save the user preset by typing in a new name and clicking the save button to the right of the drop-down menu.



→ The upper drop-down menu will now change to display the *USER* presets and your new preset will appear at the bottom of the list in the lower drop-down menu.





If you save a user preset without changing the name, it will overwrite the current user preset.

2.3.4 Removing User Presets

- 1. To remove a user preset:
- 2. Select the preset in the lower drop-down menu.



3. Delete the user preset by clicking the \emptyset button to the right of the drop-down menu.



ightarrow The user preset will be deleted and not be available when opening the kit again.



You cannot delete factory presets.

3 Kit Page

This section contains an extensive overview of the interface of the Kit Page. Use the Kit Page to view the instruments and their controls. It is separated in two main sections:



DRUMLAB's Kit Page

- (1) **Tile matrix**: Use the upper section of the Kit Page to select instruments and microphones as well as a master channel strip.
- (2) **Footer**: Use the lower section of the Kit Page to access a footer containing effects and controls for fine-tuning each instrument. This section changes to reflect the available controls for the selected instrument.

Tile Matrix

The tiles of the tile matrix can be further categorized in six types:



Tile matrix and its different tile types (kick drum selected in this image)

- (1) **Microphones** (Stereo Overhead, Mono Overhead, and Mono Room), see section ↑3.1, Microphones.
- (2) Reverb, see section ↑3.2, Reverb.
- (3) **Drum kit instruments** (Kick, Snare, Hi-hat, Toms 1-3, Crashes 1, 2 and Ride), see section †3.3, Drum Kit Instruments.
- (4) Ornamental percussion instruments (Cowbell, Conga, Bongo, Cabasa, Sticks, Finger Cymbal, Shaker, Agogo, Triangle, and Pandeiro), see section ↑3.4, Ornamental Percussion Instruments.
- (5) Close-mic percussion instruments (Claps, Woodblocks, Snaps, Triangle, Tambourine, and Shaker), see section ↑3.5, Close-Mic Percussion Instruments.
- (6) Master channel strip, see section ↑3.6, Master.

As soon as you select an instrument in the tile matrix, you will hear the corresponding sound being played back and the tile changes color to indicate selection. Additionally, the **tile controls** and a **level meter** become visible on the right-hand side of the tile:





The kick's tile in default state (left) and after selection with tile controls and level meter (right)



Crashes, ride and ornamental percussion instruments do not have any tile controls.

Deselected tiles will still indicate activated solo and mute options by displaying an illuminated S or M respectively.





Activated solo (left) and mute (right) options on deselected kick drum.

Footer

The footer below the tile matrix changes depending on the tile selected. It can display three different views: the SOURCE tab, the EFFECTS tab and the Reverb footer. Learn more about instrument-specific footers in the following sections.







The three different possible views of the footer section: SOURCE, EFFECTS, and reverb.

3.1 Microphones



Microphones in the tile matrix

Every acoustic drum sample was recorded with a set of different microphones. The top row of the tile matrix contains tiles for the following three microphone types:

- Stereo Overhead
- Mono Overhead
- Mono Room

Use each microphone tile to control the sum of all instruments' outputs sent to the corresponding microphone: Stereo Overhead, Mono Overhead, and/or Mono Room. Adjust the send level of a microphone for each instrument in the SOURCE tab of the respective instrument's footer on the Kit Page.

3.1.1 Stereo Overhead

As soon as you select the Stereo Overhead tile its **tile controls** become visible:



Stereo Overhead tile controls

- (1) **Solo** and **Mute** (S/M): Use these buttons to solo and mute single microphone types in the master mix.
- (2) Width: Turn this knob to set the stereo width.
- (3) **Volume**: Turn this knob to set the volume of all summed Stereo Overhead microphones in the master mix.
- (4) **Channel**: Click this button to set an output channel. If you select a channel other than the master, the signal will bypass the master's effects settings.

Additionally, when selected, the Stereo Overhead's EFFECTS tab is displayed in the tile footer.

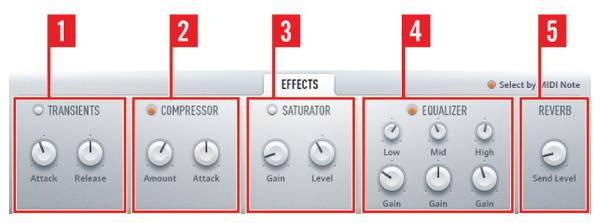
The Stereo Overhead's EFFECTS Tab

Activate an effect by clicking the button left of the effect's label so it lights up:



Not activated effect (left), activated effect (right)

The Mono Overhead and Mono Room microphones' corresponding EFFECTS tabs contain the following five effects:



The Stereo Overhead's EFFECTS tab

- (1) TRANSIENTS: This effect compresses the signal based on its volume envelope.
 - The Attack knob controls the scaling of the attack phase of the input signal's volume envelope. Increasing this parameter will add more punch and decreasing it will reduce sharp attacks.
 - The Release controls the scaling of the release phase of the input signal's volume envelope. Increasing this parameter will add more body to the sound and decreasing it will reduce the sound's tail.
- (2) COMPRESSOR: This feedback compressor uses the amplifier's output signal, rather than the input signal, which is the case for most compressors, to a threshold level. When the threshold level is reached, the compressor reduces the signal's gain level.
 - The Amount knob lets you change the percentage of signal being compressed.
 - The Attack knob adjusts the time in milliseconds which the compressor needs to reach full effect after the input signal exceeds the threshold level.
- (3) SATURATOR: This effect adds the simulated warmth of sound that comes from an analog tape machine.
 - The Gain knob adjusts the amount to which the input signal is boosted with the saturated sound.
 - The Level knob adjusts the overall output.

- (4) EQUALIZER: This musical EQ allows you to adjust three frequency bands with high precision.
 - Low: Sets a frequency in the range of 40 Hz 600 Hz below which the signal responds to the increase or decrease in volume assigned by the corresponding Gain knob below.
 - Mid: Sets an upper frequency to define a notch in the range of 600 Hz 7 kHz. The level of this band can be controlled by the corresponding Gain knob below.
 - High: Sets an upper frequency to define a high band in the range of 7 kHz 22 kHz. The level of this band can be controlled by the corresponding Gain knob below.
- (5) REVERB: The reverb includes many impulse samples of some of the best acoustic spaces for drum production.
 - Send Level: Defines the amount to which the post-FX signal is sent to the reverb effect.



You don't need to activate the REVERB effect separately. Use the Send Level knob to control the amount to which the signal of the selected instrument is sent to the reverb. You can set the overall volume of all REVERB sends in the Reverb tile controls. For details, see the relevant sections †2.2.3, Adding Effects to an Instrument and †3.2, Reverb.



The REVERB send of each instrument is a post-FX signal, i.e. all EFFECTS settings of the corresponding instrument will influence the sound of the reverb.

3.1.2 Mono Overhead & Mono Room

As soon as you select Mono Overhead or Mono Room the corresponding **tile controls** become visible:





Mono Overhead and Mono Room tile controls

(1) **Solo** and **Mute** (S/M): Use these buttons to solo and mute single microphone types in the master mix.

- (2) Pan: Turn this knob to set the panorama position of a microphone type.
- (3) **Volume**: Turn this knob to set the volume of all summed Mono Overhead or Mono Room microphones in the master mix.
- (4) **Channel**: Click this button to set an output channel. If you select a channel other than Master, the signal will bypass the master's effects settings.

Additionally, when selected, the tile's corresponding EFFECTS tab is displayed in the footer.

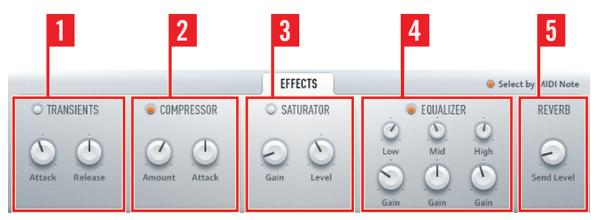
The Mono Overhead's and Mono Room's EFFECTS Tab

▶ In order to activate an effect, click the button left of the effect's label:



Not activated Effect (left), activated effect (right)

The Mono Overhead and Mono Room microphones' corresponding EFFECTS tabs contain the following five effects:



The Mono Overhead's and Mono Rooms EFFECTS tab

- (1) TRANSIENTS: This effect compresses the signal based on its volume envelope.
 - The Attack knob controls the scaling of the attack phase of the input signal's volume envelope. Increasing this parameter will add more punch and decreasing it will reduce sharp attacks.

- The Release controls the scaling of the release phase of the input signal's volume envelope. Increasing this parameter will add more body to the sound and decreasing it will reduce the sound's tail.
- (2) COMPRESSOR: This feedback compressor uses the amplifier's output signal, rather than the input signal, which is the case for most compressors, to a threshold level. When the threshold level is reached, the compressor reduces the signal's gain level.
 - The Amount knob lets you change the percentage of signal being compressed.
 - The Attack knob adjusts the time in milliseconds which the compressor needs to reach full effect after the input signal exceeds the threshold level.
- (3) SATURATOR: This effect adds the simulated warmth of sound that comes from an analog tape machine.
 - The Gain knob adjusts the amount to which the input signal is boosted with the saturated sound.
 - The Level knob adjusts the overall output.
- (4) EQUALIZER: This musical EQ allows you to adjust three frequency bands with high precision.
 - Low: Sets a frequency in the range of 40 Hz 600 Hz below which the signal responds to the increase or decrease in volume assigned by the corresponding Gain knob below.
 - Mid: Sets an upper frequency to define a notch in the range of 600 Hz 7 kHz. The level of this band can be controlled by the corresponding Gain knob below.
 - High: Sets an upper frequency to define a high band in the range of 7 kHz 22 kHz. The level of this band can be controlled by the corresponding Gain knob below.
- (5) REVERB: The reverb includes many impulse samples of some of the best acoustic spaces for drum production.
 - Send Level: Defines the amount to which the post-FX signal is sent to the reverb effect.



You don't need to activate the REVERB effect separately. Use the Send Level knob to control the amount to which the signal of the selected instrument is sent to the reverb. You can set the overall volume of all REVERB sends in the Reverb tile controls. For details, see the relevant sections \$\frac{1}{2}.2.3\$, Adding Effects to an Instrument and \$\frac{1}{3}.2\$, Reverb.



The REVERB send of each instrument is a post-FX signal, i.e. all EFFECTS settings of the corresponding instrument will influence the sound of the reverb.

3.2 Reverb



Reverb in the tile matrix

The Reverb effect includes many impulse samples of some of the best acoustic spaces for drum production. As soon as you select the Reverb tile its **tile controls** become visible:



Reverb tile and its tile controls

- (1) Solo and Mute (S/M): Use these buttons to solo and/or mute the Reverb.
- (2) **Volume**: Click and drag this fader to set the volume of the Reverb in the master mix.

When selected, the **tile footer** switches to display preview images of available rooms:

The Reverb's Footer



The Reverb's footer displaying images of available spaces

- ► To shift the selection over to reveal more room types, click on the room images to the right and left of the selected image.
- ► To select the room type, click on the drop-down menu above the selected room image. The drop-down menu below the room image allows you to select a specific room preset within that room type.
- ► To adjust the overall level of the reverb, use the fader on the Reverb tile.
- ► To adjust the reverb of a single instrument, use the Send Level knob in its SOURCE tab.

3.3 Drum Kit Instruments



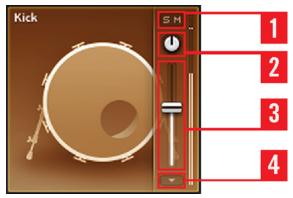
Drum kit in the tile matrix

These tiles include instruments of a standard drum kit: Kick, Snare, Toms, Hi-hat, Crashes, and Ride. The Kick, the Snare, Tom 1, 2, and 3, as well as the Hi-hat can be layered with recordings of electronic sounds. As soon as you select one of these tiles, you hear the corresponding drum sound, the **tile controls** become visible and the **tile footer** at the bottom of the interface changes to display two tabs: a SOURCE tab and an EFFECTS tab.

- For detailed information about the kick drum's controls, see section ↑3.3.1, Kick.
- For detailed information about the snare drum's controls, see section ↑3.3.2, Snare.
- For detailed information about the hi-hat's controls, see section ↑3.3.3, Hi-hat.
- For detailed information about the toms' controls, see section ↑3.3.4, Tom 1, 2, and 3.
- For detailed information about the cymbals' controls, see section ↑3.3.5, Crashes 1 & 2 and Ride.

3.3.1 Kick

The Kick's **tile controls** are the following:



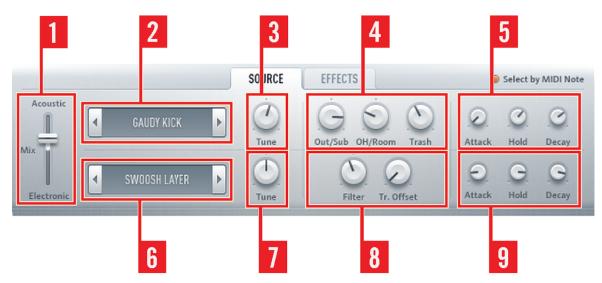
The kick drum's tile controls

- (1) **Solo** and **Mute** (S/M): Use these buttons to solo and mute single instruments.
- (2) Pan: Turn this knob to set the panorama position of the instrument.
- (3) **Volume**: Click and drag this fader to set the volume of the kick drum's combined close microphones (Out/Sub and Trash) and electronic layer in the master mix.
- (4) **Channel**: Click this button to set an output channel. If you select a channel other than the master, the signal will bypass the master's effects settings.

Additionally, when selected, the tile's SOURCE and EFFECTS tabs will be displayed in the footer.

The Kick's SOURCE Tab

The kick drums SOURCE tab contains controls for both an acoustic drum layer and an electronic one. The controls in the upper section of the SOURCE tab can be used to edit settings for the acoustic layer and the lower section for the electronic layer.



The kick drum's SOURCE tab

(1) Mix: Crossfades between the Acoustic and the Electronic layer.



You can adjust the balance between the layers of **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while clicking and dragging the crossfader.

Acoustic layer:

- (2) Acoustic layer selector: Allows you to select an acoustic sample layer.
- (3) Tune: Controls the pitch of the selected acoustic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

(4) Microphone controls:

- Out/Sub: Controls the balance between two close microphones positioned inside and outside the drum.
- OH/Room: Controls the summed send level of the overhead and room microphones for the selected acoustic instrument.

- Trash: Controls the level of a close lo-fi microphone for the selected acoustic instrument.
- (5) Envelope controls:
 - Attack: Increasing this value adds more of a fade-in to the beginning of the sound.
 - Hold: Turning this knob adjusts how long the sound stays at maximum volume.
 - Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

Electronic layer:

- (6) Electronic layer selector: Allows you to select an electronic sample layer.
- (7) Tune: Controls the pitch of the selected electronic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

- (8) Filter: Turning this knob counterclockwise adjusts the cutoff frequency of the low-pass filter. Turning this knob clockwise adjusts the cutoff frequency for the high-pass filter.
- (9) Tr. Offset (Trigger Offset): Turning this knob clockwise introduces a delay to the triggering of the electronic layer. A delay of up to 50 ms can be applied.
- (10) Envelope controls:
 - Attack: Increasing this value adds more of a fade-in to the beginning of the sound.
 - Hold: Turning this knob adjusts how long the sound stays at maximum volume
 - Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

The Kick's EFFECTS Tab

The EFFECTS tab of the Kick contains five editable effects, identical to all instruments.

Activate an effect by clicking the button left of the effect's label:



Effect off (left), effect on (right)



The five available effects for the Kick are the following:

The kick drum's EFFECTS tab

- (1) TRANSIENTS: This effect compresses the signal based on its volume envelope.
 - The Attack knob controls the scaling of the attack phase of the input signal's volume envelope. Increasing this parameter will add more punch and decreasing it will reduce sharp attacks.
 - The Release controls the scaling of the release phase of the input signal's volume envelope. Increasing this parameter will add more body to the sound and decreasing it will reduce the sound's tail.
- (2) COMPRESSOR: This feedback compressor uses the amplifier's output signal, rather than the input signal, which is the case for most compressors, to a threshold level. When the threshold level is reached, the compressor reduces the signal's gain level.
 - The Amount knob lets you change the percentage of signal being compressed.
 - The Attack knob adjusts the time in milliseconds which the compressor needs to reach full effect after the input signal exceeds the threshold level.
- (3) SATURATOR: This effect adds the simulated warmth of sound that comes from an analog tape machine.
 - The Gain knob adjusts the amount to which the input signal is boosted with the saturated sound.

- The Level knob adjusts the overall output.
- (4) EQUALIZER: This musical EQ allows you to adjust three frequency bands with high precision.
 - Low: Sets a frequency in the range of 40 Hz 600 Hz below which the signal responds to the increase or decrease in volume assigned by the corresponding Gain knob below.
 - Mid: Sets an upper frequency to define a notch in the range of 600 Hz 7 kHz. The level of this band can be controlled by the corresponding Gain knob below.
 - High: Sets an upper frequency to define a high band in the range of 7 kHz 22 kHz. The level of this band can be controlled by the corresponding Gain knob below.
- (5) REVERB: The reverb includes many impulse samples of some of the best acoustic spaces for drum production.
 - Send Level: Defines the amount to which the post-FX signal is send to the REVERB effect.



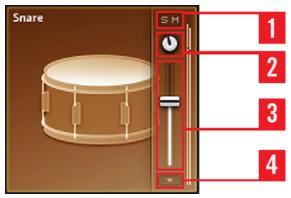
You don't need to activate the REVERB effect separately. Use the Send Level knob to control the amount to which the signal of the selected instrument is sent to the reverb. You can set the overall volume of all REVERB sends in the Reverb tile controls. For details, see the relevant sections $\uparrow 2.2.3$, Adding Effects to an Instrument and $\uparrow 3.2$, Reverb.



The REVERB send of each instrument is a post-FX signal, i.e. all EFFECTS settings of the corresponding instrument will influence the sound of the reverb.

3.3.2 **Snare**

The Snare's **tile controls** are the following:

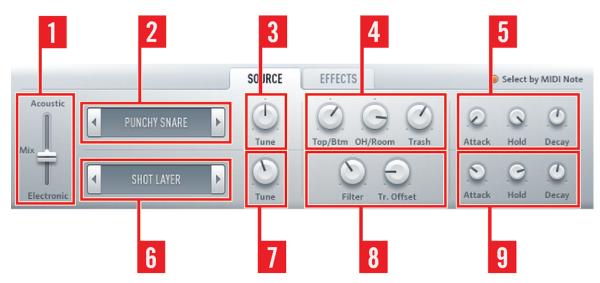


The snare drum's tile controls

- (1) **Solo** and Mute (S/M): Use these buttons to solo and mute single instruments.
- (2) Pan: Turn this knob to set the panorama position of the instrument.
- (3) **Volume**: Click and drag this fader to set the volume of the snare drum's combined close microphones (Top/Btm and Trash) and electronic layer in the master mix.
- (4) **Channel**: Click this button to set an output channel. If you select a channel other than the master, the signal will bypass the master's effects settings.

The Snare's SOURCE Tab

The snare drums SOURCE tab contains controls for both an acoustic drum layer and an electronic one. The controls in the upper section of the SOURCE tab can be used to edit settings for the acoustic layer and the lower section for the electronic layer.



SOURCE tab of the snare drum

(1) Mix: Crossfades between the Acoustic and the Electronic layer.



You can adjust the balance between the layers of **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while clicking and dragging the crossfader.

Acoustic layer:

- (2) Acoustic layer selector: Allows you to select an acoustic sample layer.
- (3) Tune: Controls the pitch of the selected acoustic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

(4) Microphone controls:

- Top/Btm: Controls the balance between a close top and a close bottom microphone for the selected acoustic instrument.
- OH/Room: Controls the summed send level of the Overhead and Room microphones for the selected acoustic instrument.

- Trash: Controls the level of a close lo-fi microphone for the selected acoustic instrument.
- (5) Envelope controls:
 - Attack: Increasing this value adds more of a fade-in to the beginning of the sound.
 - Hold: Turning this knob adjusts how long the sound stays at maximum volume.
 - Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

Electronic layer:

- (6) Electronic layer selector: Allows you to select an electronic sample layer.
- (7) Tune: Controls the pitch of the selected electronic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

- (8) Filter: Turning this knob counterclockwise adjusts the cutoff frequency of the low-pass filter. Turning this knob clockwise adjusts the cutoff frequency for the high-pass filter.
- (9) Tr. Offset (Trigger Offset): Turning this knob clockwise introduces a delay to the triggering of the electronic layer. A delay of up to 50 ms can be applied.
- (10) Envelope controls:
 - Attack: Increasing this value adds more of a fade-in to the beginning of the sound.
 - Hold: Turning this knob adjusts how long the sound stays at maximum volume
 - Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

The Snare's EFFECTS Tab

The EFFECTS tab of the Snare contains five editable effects, identical to all instruments.

Activate an effect by clicking the button left of the effect's label:



Effect off (left) and effect on (right)



The five available effects for the Snare are the following:

The snare drum's EFFECTS tab

- (1) TRANSIENTS: This effect compresses the signal based on its volume envelope.
 - The Attack knob controls the scaling of the attack phase of the input signal's volume envelope. Increasing this parameter will add more punch and decreasing it will reduce sharp attacks.
 - The Release controls the scaling of the release phase of the input signal's volume envelope. Increasing this parameter will add more body to the sound and decreasing it will reduce the sound's tail.
- (2) COMPRESSOR: This feedback compressor uses the amplifier's output signal, rather than the input signal, which is the case for most compressors, to a threshold level. When the threshold level is reached, the compressor reduces the signal's gain level.
 - The Amount knob lets you change the percentage of signal being compressed.
 - The Attack knob adjusts the time in milliseconds which the compressor needs to reach full effect after the input signal exceeds the threshold level.
- (3) SATURATOR: This effect adds the simulated warmth of sound that comes from an analog tape machine.
 - The Gain knob adjusts the amount to which the input signal is boosted with the saturated sound.

- The Level knob adjusts the overall output.
- (4) EQUALIZER: This musical EQ allows you to adjust three frequency bands with high precision.
 - Low: Sets a frequency in the range of 40 Hz 600 Hz below which the signal responds to the increase or decrease in volume assigned by the corresponding Gain knob below.
 - Mid: Sets an upper frequency to define a notch in the range of 600 Hz 7 kHz. The level of this band can be controlled by the corresponding Gain knob below.
 - High: Sets an upper frequency to define a high band in the range of 7 kHz 22 kHz. The level of this band can be controlled by the corresponding Gain knob below.
- (5) REVERB: The reverb includes many impulse samples of some of the best acoustic spaces for drum production.
 - Send Level: Defines the amount to which the post-FX signal is sent to the reverb effect.



You don't need to activate the REVERB effect separately. Use the Send Level knob to control the amount to which the signal of the selected instrument is sent to the reverb. You can set the overall volume of all REVERB sends in the Reverb tile controls. For details, see the relevant sections \$\frac{1}{2}.2.3\$, Adding Effects to an Instrument and \$\frac{1}{3}.2\$, Reverb.



The REVERB send of each instrument is a post-FX signal, i.e. all EFFECTS settings of the corresponding instrument will influence the sound of the reverb.

3.3.3 Hi-hat

The Hi-hat's **tile controls** are the following:

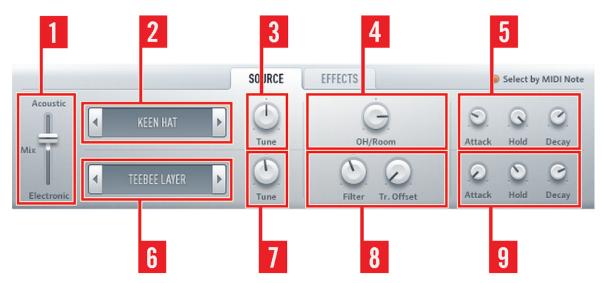


The Hi-hat's tile controls

- (1) **Solo** and **Mute** (S/M): Use these buttons to solo and mute single instruments.
- (2) Pan: Turn this knob to set the panorama position of the instrument.
- (3) **Volume**: Click and drag this fader to set the volume of the hi-hat's close microphone and electronic layer in the master mix.
- (4) **Channel**: Click this button to set an output channel. If you select a channel other than the master, the signal will bypass the master's effects settings.

The Hi-hat's SOURCE Tab

The hi-hat's SOURCE tab contains controls for both an acoustic drum layer and an electronic one. The controls in the upper section of the SOURCE tab can be used to edit settings for the acoustic layer and the lower section for the electronic layer.



The hi-hat's SOURCE tab

(1) Mix: Crossfades between the Acoustic and the Electronic layer.



You can adjust the balance between the layers of **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while clicking and dragging the crossfader.

Acoustic layer:

- (2) Acoustic layer selector: Allows you to select an acoustic sample layer.
- (3) Tune: Controls the pitch of the selected acoustic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

- (4) Microphone controls:
 - OH/Room: Controls the summed level of the Overhead and Room microphones for the selected acoustic instrument.
- (5) Envelope controls:
 - Attack: Increasing this value adds more of a fade-in to the beginning of the sound.

- Hold: Turning this knob adjusts how long the sound stays at maximum volume.
- Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

Electronic layer:

- (6) Electronic layer selector: Allows you to select an electronic sample layer.
- (7) Tune: Controls the pitch of the selected electronic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

- (8) Filter: Turning this knob counterclockwise adjusts the cutoff frequency of the low-pass filter. Turning this knob clockwise adjusts the cutoff frequency for the high-pass filter.
- (9) Tr. Offset (Trigger Offset): Turning this knob clockwise introduces a delay to the triggering of the electronic layer. A delay of up to 50 ms can be applied.
- (10) Envelope controls:
 - Attack: Increasing this value adds more of a fade-in to the beginning of the sound.
 - Hold: Turning this knob adjusts how long the sound stays at maximum volume
 - Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

The Hi-hat's EFFECTS tab

The EFFECTS tab of the Kick contains five editable effects, identical to all instruments.

▶ In order to activate an effect, click the button left of the effect's label:



Effect off (left), Effect on (right)



The Hi-hat's five available effects are the following:

The hi-hat's EFFECTS tab

- (1) TRANSIENTS: This effect compresses the signal based on its volume envelope.
 - The Attack knob controls the scaling of the attack phase of the input signal's volume envelope. Increasing this parameter will add more punch and decreasing it will reduce sharp attacks.
 - The Release controls the scaling of the release phase of the input signal's volume envelope. Increasing this parameter will add more body to the sound and decreasing it will reduce the sound's tail.
- (2) COMPRESSOR: This feedback compressor uses the amplifier's output signal, rather than the input signal, which is the case for most compressors, to a threshold level. When the threshold level is reached, the compressor reduces the signal's gain level.
 - The Amount knob lets you change the percentage of signal being compressed.
 - The Attack knob adjusts the time in milliseconds which the compressor needs to reach full effect after the input signal exceeds the threshold level.
- (3) SATURATOR: This effect adds the simulated warmth of sound that comes from an analog tape machine.
 - The Gain knob adjusts the amount to which the input signal is boosted with the saturated sound.

- The Level knob adjusts the overall output.
- (4) EQUALIZER: This musical EQ allows you to adjust three frequency bands with high precision.
 - Low: Sets a frequency in the range of 40 Hz 600 Hz below which the signal responds to the increase or decrease in volume assigned by the corresponding Gain knob below.
 - Mid: Sets an upper frequency to define a notch in the range of 600 Hz 7 kHz. The level of this band can be controlled by the corresponding Gain knob below.
 - High: Sets an upper frequency to define a high band in the range of 7 kHz 22 kHz, whose level can be controlled by the corresponding Gain knob below.
- (5) REVERB: The reverb includes many impulse samples of some of the best acoustic spaces for drum production.
 - Send Level: Defines the amount to which the post-FX signal is sent to the reverb effect.



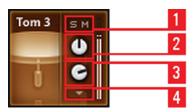
You don't need to activate the REVERB effect separately. Use the Send Level knob to control the amount to which the signal of the selected instrument is sent to the reverb. You can set the overall volume of all REVERB sends in the Reverb tile controls. For details, see the relevant sections $\uparrow 2.2.3$, Adding Effects to an Instrument and $\uparrow 3.2$, Reverb.



The REVERB send of each instrument is a post-FX signal, i.e. all EFFECTS settings of the corresponding instrument will influence the sound of the reverb.

3.3.4 Tom 1, 2, and 3

The Toms' tile controls are the following:



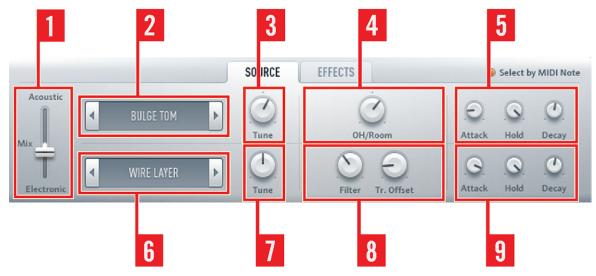
The toms' tile controls

- (1) **Solo** and **Mute** (S/M): Use these buttons to solo and mute single instruments.
- (2) Pan: Turn this knob to set the panorama position of the instrument.

- (3) **Volume**: Turn this knob to set the volume of the tom's close microphone and electronic layer in the master mix.
- (4) **Channel**: Click this button to set an output channel. If you select a channel other than the master, the signal will bypass the master's effects settings.

The Toms' SOURCE Tab

The toms' SOURCE tab contains controls for both an acoustic drum layer and an electronic one. The controls in the upper section of the SOURCE tab can be used to edit settings for the acoustic layer and the lower section for the electronic layer.



The toms' SOURCE tabs

(1) Mix: Crossfades between the Acoustic and the Electronic layer.



You can adjust the balance between the layers of **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while clicking and dragging the crossfader.

Acoustic layer:

- (2) Acoustic layer selector: Allows you to select an acoustic sample layer.
- (3) Tune: Controls the pitch of the selected acoustic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

(4) Microphone controls:

OH/Room: Controls the summed level of the Overhead and Room microphones for the selected acoustic instrument.

(5) Envelope controls:

- Attack: Increasing this value adds more of a fade-in to the beginning of the sound.
- Hold: Turning this knob adjusts how long the sound stays at maximum volume.
- Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

Electronic layer:

- (6) Electronic layer selector: Allows you to select an electronic sample layer.
- (7) Tune: Controls the pitch of the selected electronic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

- (8) Filter: Turning this knob counterclockwise adjusts the cutoff frequency of the low-pass filter. Turning this knob clockwise adjusts the cutoff frequency for the high-pass filter.
- (9) Tr. Offset (Trigger Offset): Turning this knob clockwise introduces a delay to the triggering of the electronic layer. A delay of up to 50 ms can be applied.

(10) Envelope controls:

- Attack: Increasing this value adds more of a fade-in to the beginning of the sound.
- Hold: Turning this knob adjusts how long the sound stays at maximum volume
- Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

The Toms' EFFECTS Tab

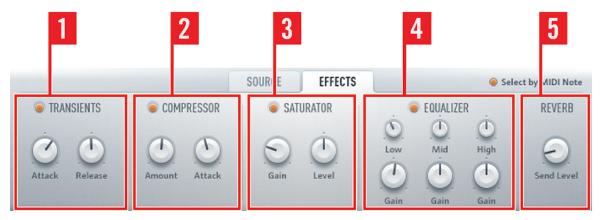
The Tom's EFFECTS tab contains five editable effects, identical to all instruments.

▶ In order to activate an effect, click the button left of the effect's label:



Effect off (left), Effect on (right)

The five available effects for Kick, Snare, Hi-hat and Tom 1, 2, and 3 are the following:



The toms' EFFECTS tabs

- (1) TRANSIENTS: This effect compresses the signal based on its volume envelope.
 - The Attack knob controls the scaling of the attack phase of the input signal's volume envelope. Increasing this parameter will add more punch and decreasing it will reduce sharp attacks.
 - The Release controls the scaling of the release phase of the input signal's volume envelope. Increasing this parameter will add more body to the sound and decreasing it will reduce the sound's tail.
- (2) COMPRESSOR: This feedback compressor uses the amplifier's output signal, rather than the input signal, which is the case for most compressors, to a threshold level. When the threshold level is reached, the compressor reduces the signal's gain level.

- The Amount knob lets you change the percentage of signal being compressed.
- The Attack knob adjusts the time in milliseconds which the compressor needs to reach full effect after the input signal exceeds the threshold level.
- (3) SATURATOR: This effect adds the simulated warmth of sound that comes from an analog tape machine.
 - The Gain knob adjusts the amount to which the input signal is boosted with the saturated sound.
 - The Level knob adjusts the overall output.
- (4) EQUALIZER: This musical EQ allows you to adjust three frequency bands with high precision.
 - Low: Sets a frequency in the range of 40 Hz 600 Hz below which the signal responds to the increase or decrease in volume assigned by the corresponding Gain knob below.
 - Mid: Sets an upper frequency to define a notch in the range of 600 Hz 7 kHz. The level of this band can be controlled by the corresponding Gain knob below.
 - High: Sets an upper frequency to define a high band in the range of 7 kHz 22 kHz. The level of this band can be controlled by the corresponding Gain knob below.
- (5) REVERB: The reverb includes many impulse samples of some of the best acoustic spaces for drum production.
 - Send Level: Defines the amount to which the post-FX signal is send to the reverb effect.



You don't need to activate the REVERB effect separately. Use the Send Level knob to control the amount to which the signal of the selected instrument is sent to the reverb. You can set the overall volume of all REVERB sends in the Reverb tile controls. For details, see the relevant sections \$\frac{1}{2}.2.3\$, Adding Effects to an Instrument and \$\frac{3}{2}.2\$, Reverb.



The REVERB send of each instrument is a post-FX signal, i.e. all EFFECTS settings of the corresponding instrument will influence the sound of the reverb.

3.3.5 Crashes 1 & 2 and Ride

These instruments were recorded exclusively through the Room and Overhead microphones. As a consequence they do not have any tile controls. Instead you can adjust the level of the Overhead and Room microphones in the master mix using the Volume knob in the SOURCE tab. The Crashes' and the Ride's tiles:



Crashes and Ride tiles (Ride selected in this image)

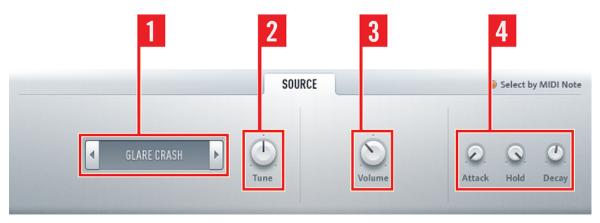
For each Crash and the Ride tile you can choose between two different acoustic layers.



The cymbals do not have EFFECTS tabs. To add effects to these instruments, use the effects of the Master tile.

Crashes' and Ride's SOURCE Tab

The Crash 1 and 2, and the Ride's SOURCE tab controls are the following:



The Crashes' and Ride's SOURCE tab

- (1) Acoustic layer selector: Allows you to select an acoustic sample layer.
- (2) Tune: Controls the pitch of the selected acoustic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

(3) Microphone controls:

 Volume: Controls the summed level of the Overhead and Room microphones in the master mix.

(4) Envelope controls:

- Attack: Increasing this value adds more of a fade-in to the beginning of the sound.
- Hold: Turning this knob adjusts how long the sound stays at maximum volume.
- Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

3.4 Ornamental Percussion Instruments



Ornamental percussion instruments

These tiles include eleven different percussion types: Conga, Bongo, Cowbell, Cabasa, Sticks, Finger Cymbal, Shaker, Agogo, Triangle, and Pandeiro. Every tile can be assigned to four different types of percussion.

Due to the fact that these instruments are mostly functioning as ornamental percussion rather than solo instruments, they were recorded exclusively over the Room and Overhead microphones and not through close microphones. As a consequence they do not have any tile controls. Instead you can adjust the level of Overhead and Room microphones in the master mix through the controls in the SOURCE tab.

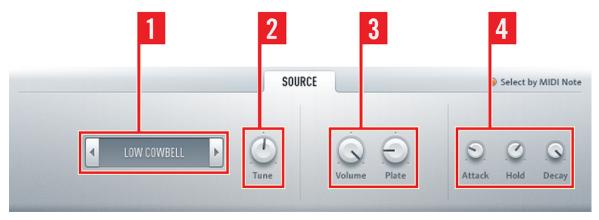


The ornamental percussion instruments do not have EFFECTS tabs. To add effects to these instruments, use the effects available on the three microphone tiles: Stereo Overhead, Mono Overhead, and Mono Room.



The volume of these instruments can only be adjusted over the microphone-relevant knobs in the SOURCE tab, i.e. if you turn down all sends in the SOURCE tab you will effectively mute these instruments.

The SOURCE Tab of Ornamental Percussion Instruments:



SOURCE tab of ornamental percussion instruments

- (1) Acoustic layer selector: Allows you to select an acoustic sample layer.
- (2) Tune: Controls the pitch of the selected acoustic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

(3) Microphone controls:

- Volume: Controls the level of the Mono and Stereo Overhead microphones in the master mix.
- Plate: Controls the level of the Mono Room microphone in the master mix.

(4) Envelope controls:

- Attack: Increasing this value adds more of a fade-in to the beginning of the sound.
- Hold: Turning this knob adjusts how long the sound stays at maximum volume.
- Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

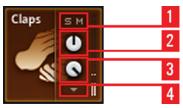
3.5 Close-Mic Percussion Instruments



Close-mic percussion instruments

These tiles contain six different percussion types: Woodblock, Snaps, Triangle, Claps, Shaker, and Tambourine. In contrast to DRUMLAB's ornamental percussion instruments these instruments were recorded through a separate close microphone. You can adjust the volume of this microphone through the volume knob in the **tile controls**. Additionally these tiles are fully editable through effects.

The Close-Mic Percussions' tile controls are the following:

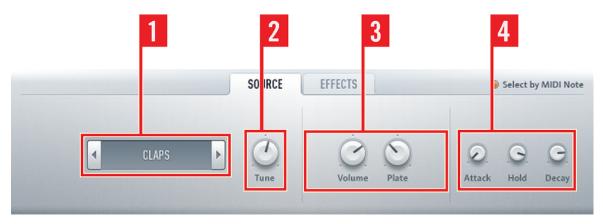


Tile controls of close-mic percussion instruments

- (1) **Solo** and **Mute** (S/M): Use these buttons to solo and mute single instruments.
- (2) Pan: Turn this knob to set the panorama position of the instrument.

- (3) **Volume**: Turn this knob to set the volume of the close-mic percussion instruments in the master mix.
- (4) **Channel**: Click this button to set an output channel. If you select a channel other than the master, the signal will bypass the master's effects settings.

The SOURCE Tab of Close-Mic Percussion Instruments



The SOURCE tab of close-mic percussion instruments

- (1) Acoustic layer selector: Allows you to select an acoustic sample layer.
- (2) Tune: Controls the pitch of the selected acoustic layer.



You can adjust the pitch of the current layer (acoustic or electronic) for **all instruments simultaneously** by holding and pressing [Alt] on your computer keyboard while turning the Tune knob.

- (3) Microphone controls:
 - Volume: Controls the level of the Mono and Stereo Overhead microphones in the master mix.
 - Plate: Controls the level of the Mono Room microphone in the master mix.
- (4) Envelope controls:
 - Attack: Increasing this value adds more of a fade-in to the beginning of the sound.
 - Hold: Turning this knob adjusts how long the sound stays at maximum volume.

 Decay: Turning this knob adjusts how quickly the sound fades out after the Hold time has passed.

The EFFECTS Tab of Close-Mic Percussion Instruments

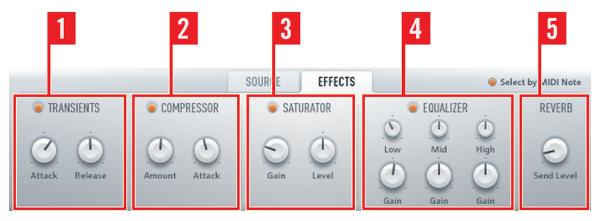
The EFFECTS tab holds five effects, identical to all the other instruments.

Activate an effect by clicking the button left of the effect's label:



Not activated effect (left), activated effect (right)

The five available effects are the following:



EFFECTS tab of close-mic percussion instruments

- (1) TRANSIENTS: This effect compresses the signal based on its volume envelope.
 - The Attack knob controls the scaling of the attack phase of the input signal's volume envelope. Increasing this parameter will add more punch and decreasing it will reduce sharp attacks.
 - The Release controls the scaling of the release phase of the input signal's volume envelope. Increasing this parameter will add more body to the sound and decreasing it will reduce the sound's tail.

- (2) COMPRESSOR: This feedback compressor uses the amplifier's output signal, rather than the input signal, which is the case for most compressors, to a threshold level. When the threshold level is reached, the compressor reduces the signal's gain level.
 - The Amount knob lets you change the percentage of signal being compressed.
 - The Attack knob adjusts the time in milliseconds which the compressor needs to reach full effect after the input signal exceeds the threshold level.
- (3) SATURATOR: This effect adds the simulated warmth of sound that comes from an analog tape machine.
 - The Gain knob adjusts the amount to which the input signal is boosted with the saturated sound.
 - The Level knob adjusts the overall output.
- (4) EQUALIZER: This musical EQ allows you to adjust three frequency bands with high precision.
 - Low: Sets a frequency in the range of 40 Hz 600 Hz below which the signal responds to the increase or decrease in volume assigned by the corresponding Gain knob below.
 - Mid: Sets an upper frequency to define a notch in the range of 600 Hz 7 kHz. The level of this band can be controlled by the corresponding Gain knob below.
 - High: Sets an upper frequency to define a high band in the range of 7 kHz 22 kHz. The level of this band can be controlled by the corresponding Gain knob below.
- (5) REVERB: The reverb includes many impulse samples of some of the best acoustic spaces for drum production.
 - Send Level: Defines the amount to which the post-FX signal is send to the reverb effect.



You don't need to activate the REVERB effect separately. Use the Send Level knob to control the amount to which the signal of the selected instrument is sent to the reverb. You can set the overall volume of all REVERB sends in the Reverb tile controls. For details, see the relevant sections \$\frac{1}{2}.2.3\$, Adding Effects to an Instrument and \$\frac{1}{3}.2\$, Reverb.



The REVERB send of each instrument is a post-FX signal, i.e. all EFFECTS settings of the corresponding instrument will influence the sound of the reverb.

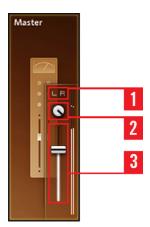
3.6 Master



The Master tile

The Master controls the output of all instruments and their effects. You can edit the output of the master channel via three controls located on the Master tile. Additionally you can add effects to the master mix on the EFFECTS tab.

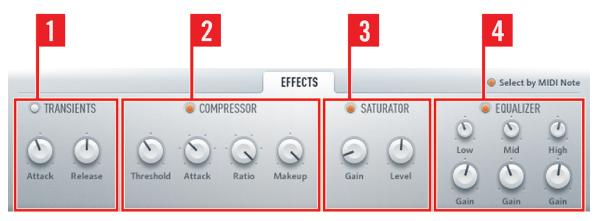
The Master tile controls are the following:



The Master tile controls

- (1) **Left** and **Right** (L/R): Use these buttons to swap the left and the right channel.
- (2) Width: Turn this knob to set the stereo width.
- (3) Master Volume: Click and drag this fader to set the Master output volume.

The Master EFFECTS Tab



The Master EFFECTS controls

- (1) TRANSIENTS: This effect compresses the signal based on its volume envelope.
 - The Attack knob controls the scaling of the attack phase of the input signal's volume envelope. Increasing this parameter will add more punch and decreasing it will reduce sharp attacks.
 - The Release controls the scaling of the release phase of the input signal's volume envelope. Increasing this parameter will add more body to the sound and decreasing it will reduce the sound's tail.
- (2) COMPRESSOR: The compressor unit available for the Master is perfect for "gluing" drums together and making them "sit" more naturally in the mix.
 - The Threshold knob adjusts the level in dB that the input signal must exceed before the compressor starts affecting the sound.
 - The Attack knob adjusts the time in milliseconds which the compressor needs to reach the ratio after the input signal exceeds the threshold level.

- The Ratio knob controls the amount of compression expressed as a ratio of "input level to output level decrease." The higher the Ratio knob is set, the more the output level will be reduced as the sound goes beyond the threshold.
- The Makeup knob allows you to increase the overall output level of the compressed sound.
- (3) SATURATOR: This effect adds the simulated warmth of sound that comes from an analog tape machine.
 - The Gain knob adjusts the amount to which the input signal is boosted with the saturated sound.
 - The Level knob adjusts the overall output.
- (4) EQUALIZER: This musical EQ allows you to adjust three frequency bands with high precision.
 - Low: Sets a frequency in the range of 40 Hz 600 Hz below which the signal responds to the increase or decrease in volume assigned by the corresponding Gain knob below.
 - Mid: Sets an upper frequency to define a notch in the range of 600 Hz 7 kHz. The level of this band can be controlled by the corresponding Gain knob below.
 - High: Sets an upper frequency to define a high band in the range of 7 kHz 22 kHz. The level of this band can be controlled by the corresponding Gain knob below.

4 Grooves Page

The Grooves page contains a browser with a huge library of organized MIDI Grooves that can be used to quickly create drum parts for a song or production. You can edit several parameters to change the beats, and all grooves can be dragged into your host.

On the Grooves page you will also find a visual representation of the groove. Every dot represents a rhythmical event in a beat. All adjustments made to Tightness, Swing, Grid or Velocity are visually reflected by the grid.



The Grooves page

The GROOVE section on the right-hand side of the header allows you to play back a groove with the play button, and quickly select any of the variations of that groove with the right and left arrow buttons. The header is available at the top of every page of DRUMLAB, so you can play the grooves even when using any of the other pages.

➤ To export a groove to your host software, click in the area of the groove name and drag the groove to your track in the host. A MIDI file of the groove will be created in your track. The GROOVE BROWSER has a total of three columns:

- The leftmost column shows a list of genre folders, each with its own set of pattern folders.
- The middle column shows a list of groove folders available for the selected genre. The standard time signature is 4/4, unless otherwise shown in the name of the groove. At the end of each groove's name, there is a suggested BPM (beats per minute) tempo to use, but the patterns can be used at any tempo. Each groove folder in turn contains a set of MIDI patterns.
- The rightmost column contains a list of all MIDI patterns for the selected genre and groove. To select a MIDI pattern, double-click the pattern's name. After selecting a pattern, you can use the up and down arrows on your computer keyboard to browse among the patterns, or the right and left arrows in the far right of the header.

Available Grooves

The **6 sound genres included with DRUMLAB** are *Smooth, Tight, Fat, Dirty, Special,* and *Raw.* A groove for a particular genre is a beat that would be used to achieve the sound of that genre. All MIDI patterns included in the same groove folder have the same general sound and feel, but all have unique changes, ranging from different hi-hat rates to additions of ghost notes to changes of drums used, etc. The different patterns have key words in their names to identify the most significant drums being used, with the exception of the kick drum, which is being used in almost all patterns.

Groove Controls

- The Tightness knob changes the amount of "groove" in the beat. The center value is the original sounding played beat. When turned all the way to the right, the beat is completely quantized and "machine-like." As the knob is turned to the left, the beat gets increasingly looser until it sounds very "sloppy" when turned all the way to the left. Depending on the type of music, all knob positions can be useful for different styles.
- The Grid selector allows you to select different quantization timings for the Tightness and Swing knobs. For example, selecting 1/8 will push the grooves towards or away from the 8th notes of the beat when using the Tightness knob.
- The Swing knob adjusts the amount of swing in the beat. Swing allows for rhythmic shifting of a Groove where the first note in a series plays longer than the one that follows.
 When the knob is all the way to the right, the swing is the most severe. When all the way

to the left, a "negative" swing is applied, where the first note in the series is actually shorter than the one that follows. Different time signatures affect the swing in different ways, so it is often best just to try the Swing knob to see how it sounds with the selected groove.

- The Velocity knob changes the range of the velocities in the grooves. At the center position, the groove plays with the same velocities that were recorded with it. As the knob is turned to the right, the range is "compressed" to the high range so that all velocity values increase until they are all at maximum when the knob is all the way to the right. Similarly, when the knob is turned to the left the velocities are "compressed" to the low range until all velocities are the lowest when turning the knob all the way to the left.
- The Tempo selection buttons allow you to immediately change the tempo of the groove or fill to be half the speed or double the speed of the originals. This can be useful when a song is recorded at a high BPM tempo, but the feel of the song is actually half of that speed (or vice versa).

Additionally you can assign every groove to a key on your MIDI keyboard. You can access the corresponding controls after clicking the Map to Note... button in the upper right corner of the GROOVE BROWSER.



MAP TO NOTE controls

► Remove all key-assigned MIDI grooves by pressing and holding the [Alt] key on your computer keyboard while clicking the Map to Note... button.

5 Options Page

At the Options page you can adjust MIDI and memory related settings.



The Options page

5.1 MIDI SETTINGS

In the MIDI SETTINGS you can change the mapping of your MIDI keyboard and adjust velocity settings.

5.1.1 MIDI Mapping

Each articulation available in the ARTICULATION selector can be assigned to one or more MIDI notes, allowing for your own customized mapping. This is very useful for adjusting the mapping in a way that suits you best when playing the drums with a MIDI keyboard, or for adjusting the mapping to a custom electronic drum setup.

To assign a MIDI note:

1. Select an octave by clicking the arrows left and right of the virtual keyboard.



2. Select a note by clicking the corresponding key on the virtual keyboard.



3. Select an INSTRUMENT and/or an ARTICULATION by clicking an item in the corresponding drop-down menus.

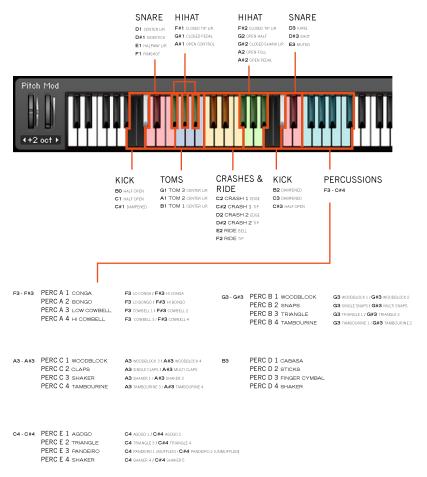




All custom MIDI mappings can be saved and loaded from the mapping preset menu to upper left of the MIDI SETTINGS.

Mapping Presets

DRUMLAB's default MIDI mapping is the following:



Default MIDI mapping

DRUMLAB also comes with a selection of mapping presets that are set up to work with popular software and electronic drum setups. These include:

• GM (General MIDI)

- V-Drums (two options)
- DrumIt Five
- EZDrummer
- Superior Drummer
- BFD
- iMap
- Addictive Drums

These mappings can be selected from the preset drop-down menu to the upper left of the MIDI SETTINGS area. If you want to make changes to these mappings, you can always do so and save the mapping preset under a different name.

Please keep in mind that every setup is different, and almost every drum kit has some particularities to it. Therefore the mapping presets will not fully match your setup without any adjustments. These mapping presets have been included to provide you with the best possible starting point. You can make additional changes to these mappings and save a new preset to fit your needs.

5.1.2 Velocity Settings

The Velocity area at the right side of the MIDI SETTINGS allows you to fine-tune the way DRUMLAB responds to MIDI input:



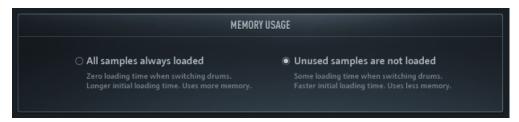
The Velocity settings



The settings for the CURVE and RANGE controls are **per key**. This way, each instrument can be adjusted to your liking. Should you need to apply a setting to all keys simultaneously, you can do this by pressing and hold the [Alt] key on your computer keyboard while adjusting the setting. The adjustment will now be active for the entire keyboard.

- In the CURVE section you can select a curve for incoming MIDI note velocities. The default is a positive exponential curve, but many MIDI input devices have different levels of sensitivity, making a linear or negative exponential curve more appropriate. There is also an option to select a constant "fixed" velocity (represented by a horizontal line).
- Utilizing the RANGE controls, you can change the lowest and highest velocity values. This
 is useful for preventing the quietest and/or the loudest sounds from playing, and instead
 be limited to the specified minimum and maximum. Different MIDI input devices, such as
 MIDI keyboards and electronic drum kits, will also need their own velocity setting adjustments to match your playing style.

5.2 Memory Usage



The MEMORY USAGE options

At the bottom of the page, you can edit settings for how DRUMLAB will be using your computer's memory resources. There are two options here:

All samples always loaded: This option is good if you are still experimenting to find the right sound samples for your drum setup. As soon as you start DRUMLAB all available samples are loaded into the memory. As a consequence you will have a faster tile response after exchanging instrument samples.

Unused samples are not loaded: This option is good if you already have all your sound samples chosen and just want to work on fine-tuning your sounds. Unused samples are not loaded into the memory when you have activated this option, leaving more system resources for currently executed tasks. On the other hand, if you decide to select another sound sample, it will take a little moment until it is loaded into the drum kit.



The settings in this area are specifically important if your computer has a lesser amount of RAM. As a natural consequence, settings made in this area will be less influencing your workflow if you have a faster computer.

6 Using Single Instrument NKIs

If you prefer to use individual drum sounds on separate channels in your host software, DRUM-LAB allows you to load each instrument as a single instrument within KONTAKT.

6.1 Overview of the Interface

This section gives you an overview of the single instrument interface and its controls.



A kick drum loaded as a single instrument

- (1) **Drum tile** and **Options**: Use this section to edit settings corresponding to settings found on the Options page.
- (2) **Footer**: Use this section to edit controls corresponding to the footer on the Kit Page, i.e. the SOURCE and EFFECTS tabs (cymbals and some percussive instruments do not have an EFFECTS tab).

6.1.1 Drum Tile and Options



A single instrument kick drum and its options

(1) KEY RANGE controls:

- LEARN: When activated, this button lets you select the key range by pressing the lowest and the highest note on the keyboard. The keys within the key range all play back the instrument at a different pitch. These keys illuminate pink. Keys that are not included in the key range are muted and not lit.
- Low key range: Controls the lowest note of the playable key range.
- High key range: Controls the highest note of the playable key range.

(2) VELOCITY curve selector (listed left to right):

- Linear velocity curve: Sets the velocity behavior to a linear response.
- Exponential velocity curve: +: Sets the velocity behavior to a positive exponential response.
- Exponential velocity curve -: Sets the velocity behavior to a negative exponential response.
- Fixed velocity: Sets all played velocities to 127.

- (3) Articulation: Selects the articulation used to play back the instrument.
- (4) Drum tile: Visualizes the selected instrument. The instrument is played back when the tile is clicked.

(5) Kit Mics:

- Stereo OH: When illuminated, the stereo overhead microphone is **muted**.
- Mono OH: When illuminated, the mono overhead microphone is **muted**.
- Mono Room: When illuminated, the mono room microphone is muted.

6.1.2 Footer

The tabs and controls displayed in the footer are specific to each instrument. For detailed information on each instrument's controls, refer to section ↑3, Kit Page.

SOURCE Tab



The SOURCE tab of a single instrument

The SOURCE tab available for each instrument is identical to the SOURCE tab of the corresponding instrument on the Kit Page when the entire tile matrix is loaded (for details, refer to each individual instrument in section \(\frac{1}{3} \), Kit Page).

EFFECTS Tab



The EFFECTS tab of a kick drum loaded as a single instrument

The EFFECTS tab available for certain single instruments is identical to the EFFECTS tab of the Master tile on the Kit Page when the entire tile matrix is loaded (see section \$\gamma 3.6\$, Master).

6.2 Editing DRUMLAB Instruments

This section contains step-by-step guides designed to walk you through the basic functions of DRUMLAB's single instrument NKIs. For information on workflows for using DRUMLAB's tile matrix on the Kit Page, refer to section †2.2, Selecting Tiles to Edit DRUMLAB Instruments and Effects.

6.2.1 Selecting Instrument Layers

Each instrument comes with a number of selectable acoustic layers. Some instruments also have a second, electronic layer that can be selected from the vast DRUMLAB library, giving you the possibility of layering your drums for a richer, well-rounded sound.

Selecting an Acoustic Layer

To change an instrument's acoustic layer:

1. Click on the SOURCE tab.

2. Open the list of available acoustic layers by clicking in the middle of the Acoustic layer selector.



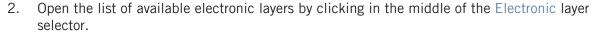
- 3. Change the layer by selecting an acoustic layer from the drop-down menu.
- 4. If an instrument also has an electronic layer, you can mix the two layers by clicking and dragging the crossfader.



Selecting an Electronic Layer

To change an instrument's electronic layer:

1. Click on the SOURCE tab.





- 3. Change the layer by selecting an item from the drop-down menu.
- 4. Mix the electronic layer with the acoustic layer by clicking and dragging the crossfader.



6.2.2 Changing an Instrument's Articulation

Each instrument can be played using a number of articulations. Selecting another articulation can abruptly change the way for example your snare drum sounds.

To change the articulation:





2. Change the articulation used to play back the instrument by selecting an item from the drop-down menu.



6.2.3 Controlling the Kit Mics

For detailed information on the Kit Mics, refer to section $\uparrow 3.1$, Microphones. To adjust the output level of single instruments:

Kick and Snare

1. Click on the SOURCE tab.

2. Adjust the single instrument's send level to the Kit Mics by turning the OH/Room knob in either direction.



► Mute the instrument's output for each of the individual Kit Mics by clicking the corresponding button.



→ The button illuminates to reflect that the microphone is muted.



Selecting all three Kit Mics will mute all output for the Kit Mics. However, the output from the close mics as well as the Electronic layer will still be audible.

Hi-hat and Toms

- 1. Click on the SOURCE tab.
- 2. Adjust the single instrument's send level to the Kit Mics by turning the OH/Room knob in either direction.



Mute the instrument's output for each of the individual Kit Mics by clicking the corresponding button.



→ The button illuminates to reflect that the microphone is muted.



Selecting all three Kit Mics will mute all output for the Kit Mics. However, the output from the close mics as well as the Electronic layer will still be audible.

Crash and Ride Cymbals

➤ On the SOURCE tab, adjust the single instrument's send level to the Kit Mics by turning the Volume knob in either direction.



► Mute the instrument's output for each of the individual Kit Mics by clicking the corresponding button.



→ The button illuminates to reflect that the microphone is muted.



Selecting all three Kit Mics will effectively mute crash and ride cymbals.

Ornamental Percussion Instruments



These instruments include eleven different percussion types: Conga, Bongo, Cowbell, Cabasa, Sticks, Finger Cymbal, Shaker, Agogo, Triangle, and Pandeiro.

▶ On the SOURCE tab, adjust the single instrument's send level to the Stereo OH and Mono OH microphones by turning the Volume knob in either direction.



► On the SOURCE tab, adjust the single instrument's send level to the Mono Room microphone by turning the Plate knob in either direction.



Mute the instrument's output for each of the individual Kit Mics by clicking the corresponding button.



→ The button illuminates to reflect that the microphone is muted.



Selecting all three Kit Mics will effectively mute ornamental percussion.

Close-Mic Percussion Instruments



These instruments include six different percussion types: Woodblock, Snaps, Triangle, Claps, Shaker, and Tambourine.

On the SOURCE tab, adjust the single instrument's send level to the Stereo OH and Mono OH microphones by turning the Volume knob in either direction.



On the SOURCE tab, adjust the single instrument's send level to the Mono Room microphone by turning the Plate knob in either direction.



► Mute the instrument's output for each of the individual Kit Mics by clicking the corresponding button.



→ The button illuminates to reflect that the microphone is muted.



Selecting all three Kit Mics will mute all output for the Kit Mics. However, the output from the close mics will still be audible.

6.2.4 Fine-Controlling the Sound of an Instrument

To adjust a single instrument's (or even a single sample layer's) sound settings:

- 1. Click on the SOURCE tab in the instrument's footer.
- ► Alter the pitch by adjusting the Tune knob.



► Edit the volume envelope by adjusting the Attack, Hold and Decay with the respective knobs.



► Add a low-pass filter to an instrument's electronic layer by turning the Filter knob counterclockwise.



Add a high-pass filter to an instrument's electronic layer by turning the Filter knob clockwise.



▶ Delay the triggering of an instrument's electronic layer by turning the Tr. Offset knob clockwise. A delay of up to 50 ms can be applied.



6.2.5 Adding Effects to an Instrument

The kick, snare, hi-hat, toms, and some percussion instruments can be processed by designated effect units. You can use effects to enhance the sound of your drums or to refine certain frequencies. For detailed information on the effect units, refer to the corresponding section of chapter \\$3.6, Master.



The EFFECTS tab of a kick drum loaded as a single instrument

Editing the Transients

To change TRANSIENTS settings:

- 1. Click on the EFFECTS tab.
- 2. Activate the effect by clicking the switch left of the effect's label so it lights up.



3. Fine-tune the effect by adjusting the Attack and Release knobs.

Editing the Compressor

To change COMPRESSOR settings:

1. Click on the EFFECTS tab.

2. Activate the effect by clicking the switch left of the effect's label so it lights up.



3. Fine-tune the effect by adjusting the Threshold, Attack, Ratio, and Makeup knobs.

Editing the Saturator

To change SATURATOR settings:

- 1. Click on the EFFECTS tab.
- 2. Activate the effect by clicking the switch left of the effect's label so it lights up.



3. Fine-tune the effect by adjusting the Gain and Level knobs.

Editing the Equalizer

To change EQUALIZER settings:

1. Click on the EFFECTS tab.

2. Activate the effect by clicking the switch left of the effect's label so it lights up.



3. Fine-tune the effect by adjusting the Low, Mid, High EQ bands and their corresponding Gain knobs.

6.2.6 Editing Key Range

Setting the key range lets you play a single instrument in different pitches along the selected range of keys on the keyboard or your MIDI device.

Setting the Key Range Using Learn

To set the KEY RANGE using the keyboard or a connected MIDI device:

1. Activate KEY RANGE by clicking the LEARN button to the upper left so it illuminates.



- 2. Set the lowest note of the key range by pressing the corresponding key on the keyboard.
- 3. Set the highest note of the key range by pressing the corresponding key on the keyboard.
- → The KEY RANGE will be visible by being illuminated pink, while the keys not included are muted and unlit.



Setting the Key Range Using Selectors

To set the KEY RANGE using the KEY RANGE selectors:

1. Set the lowest note of the KEY RANGE by selecting a note in the left selector.



2. Set the highest not of the KEY RANGE by selecting a note in the right selector.



→ The KEY RANGE will be visible by being illuminated pink, while the keys not included are muted and unlit.



6.2.7 Editing Velocity

Selecting a different velocity behavior for an instrument can drastically change e.g. the perceived size of both the instrument and the room.

To change the velocity curve:

▶ Select one of the four available velocity curves by clicking the corresponding button.



7 Credits

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